

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

July 29, 2016

Mr. William Frye Senior VP of Golf Ball Operations Acushnet Company P.O. Box 965 Fairhaven, Massachusetts 02719 RE: NEW BEDFORD

Transmittal No.: X271204 Application No.: SE-16-012

Class: SM79-7 FMF No.: 38027

AIR QUALITY PLAN APPROVAL

Dear Mr. Frye:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the proposed alteration of existing custom golf ball printing operations, at your facility located at 700 Belleville Ave, New Bedford, Massachusetts ("Facility").

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner / operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. <u>DESCRIPTION OF FACILITY AND APPLICATION</u>

The Acushnet Company's Custom Golf Ball Plant "C" is located at 700 Belleville Ave., New Bedford, MA. The facility's processes include custom printing, decal application, and spraying of golf balls manufactured by Acushnet in other facilities in Massachusetts. Research & Development activities are also conducted on-site.

In this Application, the Permittee requests:

- Installation of four new custom pad printing machines. These four units have combined potential emissions of 0.785 tons per year; the restricted emissions established herein have not increased. As each of the four new units will replace a previously approved unit upon installation, the total number of 63 custom pad printing machines will not change.
- An extension of the authorization to install the following previously approved pad printing machines:
 - Two 1-2 color manual closed cup units;
 - Three 1-color personalized manual units;
 - Six 5-color single head units.

The total number of 63 custom pad printing machines will not change.

• An extension of the authorization to install one previously approved centrifugal parts washer, increasing the facility's inventory from five to six parts washers.

Best Available Control Technology is identified in Table 2.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

	Table 1					
EU#	Description	Quantity	Pollution Control Device (PCD)			
1	Custom Pad Printers	63 total	none			
2	Custom Spray Booth 40" wide x 70" high x 40" deep	1 existing	Supra I and Supra I Mini-mesh filter media (or equivalent)			
3	Cleaning Operations	Not applicable	none			
4	Centrifugal Parts Washers	5 existing plus 1 previously approved	none			
5	Research and Development Equipment	1 paint booth and 1 pad printer	Supra EPG arrestor pads (or equivalent)			

	Table 1					
EU#	Description	Quantity	Pollution Control Device (PCD)			
6	Natural Gas-Fired Boilers, Cleaver Brooks Model No. CB(LE)700-125-1, each equipped with Low NO _x Flue Gas Recirculation burner technology, each at 5.230MMBtu/hr	2 existing	none			
7	Emergency Generator, Olympian Model No. D100P1, 1.1 MMBtu/hr, Installed in 2001, exempt from Plan Approval per 310 CMR 7.02(2)(b)29.a.	1 existing	none			

Table 1 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

 $NO_x = Nitrogen Oxides$

MMBtu/hr = Million British thermal units per hour

3. <u>APPLICABLE REQUIREMENTS</u>

A. OPERATIONAL, PRODUCTION, AND EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2, below:

	Table 2				
EU#	Operational / Production Limit	Air Contaminant	Emission Limit		
	478 gallons of ink used per month				
1	2,775 gallons of ink used per consecutive 12-month period		1.29 TPM		
	Maximum VOC content of 5.387 pounds per gallon of ink	VOC	7.5 TPY		
	Maximum VOC content of 17.479 pounds per gallon of solid (with reducing solvent)				

Table 2				
EU#		Operational / Production Limit	Air Contaminant	Emission Limit
2		508 gallons used per month 4.23 lb VOC/gal paint as applied 9.75 lb VOC/gal solids as applied 8.31 lb/gal applied 4734 coats/gal minimum transfer efficiency 128 gallons used per month 6.33 lb VOC/gal paint as applied 40.67 lb VOC/gal solids as applied 7.815 lb/gal applied 4035.5 coats/gal minimum transfer efficiency 108 gallons used per month 5.249 lb VOC/gal paint as applied 19.4014 lb VOC/gal solids as applied 4760.2 coats/gal minimum transfer efficiency llons of all paint (combined) used per ive 12-month period	VOC	1.76 TPM 6.7 TPY
3	Achieve a minimum particulate control efficiency of 97% 433 gallons of cleaning solvent used per month 2,154 gallons of cleaning solvent used per consecutive 12-month period 8.03 pounds per gallon of cleaning solvent 518 gallons of Methyl Ethyl Ketone (MEK) used per month 2,591 gallons of MEK used per consecutive 12-month period		PM VOC	0.1 TPY 1.75 TPM 8.65 TPY
4	228 gallons of centrifugal parts washing solvent used per month 1,592 gallons of centrifugal parts washing solvent used per consecutive 12-month period 7.92 pounds per gallon of centrifugal parts washing solvent, as applied		VOC	0.91 TPM 6.31 TPY
5	4.6 tons as contained in the raw materials used in R&D activities per consecutive 12-month period 0.02 tons as contained in the raw materials used in R&D activities per consecutive 12-month period Achieve a minimum particulate control efficiency of 97.5%		VOC - PM	4.6 TPY 0.02 TPY

Table 2				
EU#	Operational / Production Limit	Air Contaminant	Emission Limit	
	Notural gas fired only based on 9.760 hours of operation	VOC	0.25 TPY ¹	
6	Natural-gas fired only, based on 8,760 hours of operation.	PM	0.34 TPY ¹	
0	NO _x emissions from each boiler shall not exceed 0.035 pounds per MMBtu	NO _x	1.60 TPY ¹	
7	Less than or equal to 300 hours of operation per consecutive 12-month period including normal maintenance and testing procedures & emergencies	NO _x	0.73 TPY ²	
		VOC	34.01 TPY	
		PM	0.46 TPY	
Facility -wide		HAP (single)	9.9 TPY	
		HAPs (total)	24.9 TPY	
		NO _x	2.33 TPY	
		Visible Emissions ³	0% opacity	

Table 2 Key and Footnotes:

EU# = Emission Unit Number

 $NO_x = Nitrogen Oxides$

 $SO_2 = Sulfur Dioxide$

PM = Total Particulate Matter

VOC = Volatile Organic Compounds

HAP (single) = maximum single Hazardous Air Pollutant

HAPs (total) = total Hazardous Air Pollutants

TPM = tons per month

TPY = tons per consecutive 12-month period

MEK = Methyl Ethyl Ketone

R&D = Research and Development

MMBtu = Million British thermal units

lb = pounds

gal = gallon

% = percent

- 1 = total for 2 boilers, listed for facility-wide annual aggregate emissions accounting
- 2 = listed for facility-wide annual aggregate emissions accounting
- 3 = exclusive of uncombined water vapor

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

	Table 3			
EU#	Monitoring and Testing Requirements			
6	1. In accordance with 310 CMR 7.04(4)(a), EU#6 shall be inspected and maintained in accordance with the manufacturer's recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the Facility.			
	2. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.			
Facility -wide	3. The Permittee shall conduct emission testing, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13, for MassDEP required stack emission testing.			
	4. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13			

Table 3 Key:

EU# = Emission Unit Number

	Table 4				
EU#	Record Keeping Requirements				
Facility -wide	 The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. The Permittee may use a record keeping system that contains the information equivalent to the electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, which can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report. The Permittee shall maintain records of monitoring and testing as required by Table 3. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the 				
	most up-to-date SOMP for the EU(s) and PCD(s) approved herein on-site. 4. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.				
	5. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCD(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; and the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.				

	Table 4				
EU#	Record Keeping Requirements				
Facility -wide	6. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.				
	7. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.				
	8. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.				

Table 4 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure

USEPA = United States Environmental Protection Agency

	Table 5			
EU#	Reporting Requirements			
	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).			
	2. The Permittee shall notify the Southeast Regional Office of MassDEP, BAW Compliance & Enforcement (C/E) Chief by telephone (508) 946-2878, email sero.air@state.ma.us or fax (508) 946-2865 as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the C/E Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).			
Facility- wide	3. The Permittee shall report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.			
	4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's request.			
	5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.			
	6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.			

Acushnet Company, Custom Plant "C" July 29, 2016 - Plan Approval Transmittal No. X271204 Application No. SE-16-012 Page 8 of 12

Table 5 Key:

EU# = Emission Unit Number C/E = Compliance & Enforcement

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6			
EU#	Special Terms and Conditions		
	MassDEP approves the Permittee's request to install four new 1-2 color automation pad printing machines, with each unit replacing a previously approved pad printing machine upon installation, as described in Application SE-16-012.		
1	2. MassDEP approves the Permittee's request for a time extension for the authorization to commence installation of eleven pad printing machines previously approved in Plan Approval SE-15-026:		
1	Two 1-2 color manual closed cup units		
	Three 1-color personalized manual units, and		
	Six 5-color single head units		
	The two year time extension commences on the date of this Plan Approval.		
	3. The Permittee shall not use the pad printing machines for any wood or paper items.		
1, 2	4. The Permittee shall limit VOC emissions from the paint coating and ink operations by using only those paint coatings and inks specified in a coating table maintained by the Permittee. The Permittee is responsible for the completeness and accuracy of the coating table, including VOC and solids content information. Additional paint coatings and inks may be applied at the minimum transfer efficiencies listed in Table 2, provided that prior to use of any new paint coating and ink formulations, the Permittee shall:		
	 a. Maintain an updated coating table with accurate Revision No. and date. The Permittee shall also maintain on file a BWP AQ Coatings & Inks form (with calculations and VOC test data if available) for the maximum application rate of the proposed new coating(s) and ink(s). b. Ensure that use of any new coating(s) and ink(s) shall not cause the facility to exceed the maximum VOC to solids ratio limit on a VOC per gallon of solids (as applied) basis as listed in Table 2 		
	c. If any new coating or ink exceeds the limits contained in Table 2, the Permittee must obtain MassDEP approval prior to the production application of the coating(s)/ink(s).		

Table 6				
EU#	Special Terms and Conditions			
4	 5. MassDEP approves the Permittee's request for a time extension for the authorization to commence installation of one new centrifugal parts washer, previously approved in Plan Approval SE-15-026. The two year time extension commences on the date of this Plan Approval. 6. The Permittee shall not operate more than five centrifugal parts washers at any one time. 			
Facility- wide	 The following Air Quality Plan Approval previously issued to the Facility, is superseded herein: SE-15-026, Transmittal No. X267676, dated November 6, 2015. This Approval shall be deemed null and void. The underlying applications for all previous Approvals shall remain valid. The Facility may reconcile the VOCs contained in any hazardous waste shipped during the month when determining monthly emissions. The facility shall maintain hazardous waste disposal records and purchase records for VOC containing materials, such that the Department may check these for consistency with plant logs. Such records shall verify the VOCs, and the quantity present, in the waste being shipped if reconciling monthly emissions. 			
	9. The Facility shall store and dispose of VOCs and HAPs in a manner that will minimize evaporation to the atmosphere. Proper storage shall be in a container with a tight fitting cover. Proper disposal shall be in a manner consistent with all applicable regulations.			
	10. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.			

Table 6 Key:

EU# = Emission Unit Number

B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as "shanty caps" and "egg beaters." The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

	Table 7					
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (inches)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)		
1	75	22	10	Approximately 70		
2	45	14	40 - 60	Approximately 70		
4*	45/65(new)	12/12	40 – 60/25-35	Approximately 70		

Table 7 Key:

EU# = Emission Unit Number

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that construction or demolition shall be done in accordance occur which 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.

^oF = Degree Fahrenheit

^{*}new also serves ink mixing

Acushnet Company, Custom Plant "C" July 29, 2016 - Plan Approval Transmittal No. X271204 Application No. SE-16-012 Page 11 of 12

- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

Acushnet Company, Custom Plant "C"
July 29, 2016 - Plan Approval
Transmittal No. X271204
Application No. SE-16-012
Page 12 of 12

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Dan Kamieniecki by telephone at (508) 946-2717, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing Chief, Air Quality Permitting Bureau of Air and Waste

Enclosure

cc: New Bedford Fire Dept.

New Bedford Board of Health
M. Pinaud – MassDEP/SERO
Y. Tian – MassDEP/Boston
D. Fefer – Epsilon Associates, Inc.
K. Kelly – Acushnet Co.